



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/257,208

02/25/1999

D. CHRISTOPHER DRYER

AM9-98-093

1871

21254

7590

01/15/2003

MCGINN & GIBB, PLLC  
8321 OLD COURTHOUSE ROAD  
SUITE 200  
VIENNA, VA 22182-3817

EXAMINER

SAX, STEVEN PAUL

ART UNIT

PAPER NUMBER

2174

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

091257208

Applicant(s)

Dryer et al

Examiner

Sax

Group Art Unit

2174

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 - MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

12/18/02

- ☒ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-61 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-61 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2174

### DETAILED ACTION

1. This application has been examined. The RCE and amendment filed 12/18/02 have been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball et al (6212502 B1) and Tognazzini et al (5886683).

4. Regarding claim 1, Ball et al show an unobtrusive system for detecting a subject's level of arousal and interest (column 4 lines 55-68, column 5 lines 1-5, column 8 lines 43-55, column 9 lines 11-30). To measure arousal level, Ball et al for example measure a physical attribute of the subject (column 8 lines 5-29). Ball et al do not specifically show what the subject is 'attending' but do mention detecting attentiveness. Furthermore, Tognazzini et al do show detecting what a subject is gazing at or 'attending to' (column 5 lines 54-68, column 6 lines 1-25, column 8 lines 5-19) to determine attentiveness to media images and objects on a network. The

Art Unit: 2173

web browser information (column 11 lines 15-45) are all examples of media. It would have been obvious to a person with ordinary skill in the art to include the gaze detection feature of Tognazzini et al in the interest and arousal detection system of Ball et al, because it would provide an efficient and convenient way to detect attentiveness. The gaze tracker device (Tognazzini column 9 lines 45-60) is in real time.

5. Regarding claim 2, Tognazzini et al show as explained above the gaze determination.
6. Regarding claim 3, Tognazzini et al show determining the fixation time of the gaze (column 10 lines 35-44).
7. Regarding claim 4, Tognazzini et al show in column 11 lines 15-45 the detecting attention to media content.
8. Regarding claims 5-10, Ball et al show column 8 lines 5-29 measuring the subject's facial expressions, head gestures, and speech.
9. Regarding claim 11, Ball et al show providing relevance feedback (column 8 lines 10-12). So does Tognazzini et al (column 6 lines 19-25).

Art Unit: 2173

10. Claims 12-55 show the same features as above and are rejected for the same reasons.

11. Regarding claim 56, as noted, Ball et al show measuring the facial and head gestures (column 8 lines 5-29). The claim recites 'includes one of...' and therefore since Ball et al show atleast one of these elements, it therefore covers the claim.

12. Regarding claim 57, as noted, Tognazzini et al show the gaze fixation density and pupil size attribute (column 10 lines 35-44). Ball et al show the audio utterance (speech), and upper body movement (head gesture) (again column 8 lines 5-29).

13. Regarding claim 58, Tognazzini shows providing additional media content as feedback (column 6 lines 19-25) and operates in real time (column 9 lines 45-60).

14. Claims 59-61 show the same features as above and are rejected for the same reasons.

15. Applicant does not provide any new arguments. Note that the amendments do not further distinguish the claims over the prior art.

16. Any inquiry concerning this communication should be directed to Steve Sax at telephone number (703) 305-9582.

Art Unit: 2173


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Sax whose telephone number is (703) 305-9582. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238	After Final Communication
(703) 746-7239	Official Communication
(703) 746-7420	For Status Inquiries, draft communication

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
STEVEN SAX  
PRIMARY EXAMINER